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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/293,163	04/16/1999	E. MICHAEL KERR	5593	4521

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EXAMINER	
REDDICK, MARIE L	
ART UNIT	PAPER NUMBER
1713	

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/293,163

Applicant(s)

KERR ET AL.

Examiner

Judy M. Reddick

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1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 December 1899.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-13 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

#### DETAILED ACTION

##### Election/Restrictions.

1. Newly submitted claims 8-13 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The originally presented invention(claims 1, 2 and 4-7) is drawn to a method for modifying the rheology of a slurry of a solid material in water which basically involves adding a sulfonate-containing polymer to said slurry and wet grinding, in a mill, the slurry. The newly presented invention(claims 8-13) is drawn to a method for pumping a slurry of a solid material and water from a mine to a processing plant. The inventions are separate and distinct, each from the other, as per having been related as mutually exclusive species, each not requiring the particulars of the other for patentability. Note, e.g., that the invention of claims 8-13 does not require a wet grinding step as does the invention of claims 1, 2 and 4-7 nor does the invention of claims 1, 2 and 4-7 require the pumping of the slurry from a mine to a processing plant as does the invention of claims 8-13, the processes are substantially different.

2. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 8-13 have withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

##### Response to Amendment

3. The Declaration filed on 06.30.03 under 37 CFR 1.131 is sufficient to overcome the Barham et al reference.

##### Specification

4. The disclosure is objected to because of the following informalities: On page 5, lines 15-16, "methy" should read "methyl" so as to correct an obvious typographical error.

Appropriate correction is required.

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5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As far as the Examiner can tell, no support can be found for the recited "number average molecular weight" and this, as such, without any guidelines from applicants as to where support might be found, engenders a New Matter situation.

**Claim Rejections - 35 USC § 102**

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 2 and 4-7 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Farrar et al (U.S. 4,509,987) as per reasons set forth in the previous Office Action per paper no. 16, 08.19.02, paragraph no. 11. Further, As to claims 1, 2 and 4-7), Farrar et al teach a method for modifying the rheology of a slurry of a

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solid material and water wherein the solid material includes a mineral sand(1, the paragrap bridging col. 3-4), the method comprising adding to the slurry a sulfonate-containing polymer and wet grinding the slurry in a mill(1, col. 3, lines 1-68, col. 4, lines 11-39); wherein the polymer is selected from the group consisting of a sulfonate-containing polyacrylamide, a sulfonate-containing polyacrylic acid or a mixture thereof(2, col. 4, lines 40-62); wherein the polymer comprises repeat units from acrylamide, acrylic acid and acrylamide-2-methyl propane sulfonate monomers(4, col. 4, lines 40-62); wherein the polymer is further characterized as having a molecular weight ranging from about 2,000 to 20,000 number average molecular weight(5, col. 4, lines 63-68); wherein the polymer is further characterized as comprising repeat units derived from about 3 to about 40 mole% acrylamide-2-methyl propane sulfonate monomer, from about 5 to about 45 mole% acrylamide monomer and from about 30 to about 70 mol% of acrylic acid(6, col. 4, lines 65-68) and wherein the polymer is further characterized as comprising repeat units derived from about 5 to about 10 mole% acrylamide-2-methyl propane sulfonate monomer, from about 30 to about 40 mole% acrylamide monomer and from about 44 to about 65 mole% of acrylic acid monomer(7, col. 4, lines 65-68). More specifically, one having ordinary skill in the art would have readily envisioned adding a mineral sand such as titania to the Examples(B) thru (F)(col. 5, lines 14-39) following the guidelines of Farrar et al @ col. 4, line 2. Even if it turns out that the Examiner has somehow missed the boat and the claims are not anticipated, it would have been obvious to the skilled artisan to extrapolate the specifically defined method for modifying the rheology of a slurry of a solid material and water wherein the solid material includes a mineral sand wherein the method comprises adding to the slurry a sulfonate-containing polymer and wet grinding the slurry in a mill, as claimed, and with a reasonable expectation of success. Moreover, the "sand" component per the Runs of Farrar et al is generic to the claimed "mineral sand" and would necessarily imply that any sand, including the claimed mineral sand would have been operable within the scope of patentees invention and with a reasonable expectation of success.

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As to the introductory phrase "A method for modifying the rheology of a slurry of a solid material and water", while the references do not show a specific recognition of that result, its discovery by applicants is tantamount only to finding a property in the old composition", In re Tomlinson, 363 F.2d 928, 934 150 USPQ 623, 628 (CCPA 1966).

#### Response to Arguments

10. Applicant's arguments filed 06.30.03 have been fully considered but they are not persuasive.

Relative to Farrar et al---The crux of Counsel's arguments appears to hinge on Farrar et al not teaching the use of substances such as mineral sands, which include TiO<sub>2</sub>, which is chemically distinct from common sand. Counsel is cordially directed to col. 3, lines 57+ wherein it is taught that it is possible to include in the dispersion other inorganic particulate material in the presence of the dispersing agent and along with the calcium carbonate such as talc or titania(titanium dioxide), col. 4, line 2. As to the wet grinding in a mill, Counsel is cordially directed to col. 4, lines 11-39 coupled with the Example @ col. 5, lines 14-24.

#### Conclusion

11. The prior art to Lange et al(U.S. 3,898,037) listed on the attached PTO FORM 892 is cited as of teaching methods of making the copolymers used as a preferred dispersing agent in the system of Farrar et al. The remainder of the prior art listed on the attached PTO FORM 892 is cited as of being illustrative of the general state of the art.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

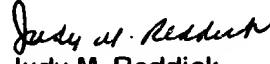
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the


THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (703)308-4346. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-8183.

  
Judy M. Reddick  
Primary Examiner  
Art Unit 1713

JMR   
10.17.03